

REMARKS

I. Introduction

By the present Amendment, claims 1, 3, 7-10, 14-19, 21, and 24-28 have been amended. No claims have been added or cancelled. Accordingly, claims 1, 3, 6-12, 14-21, 24-28 remain pending in the application. Claims 1, 9, 16, 21, and 24 are independent.

II. Office Action Summary

In the Office Action of May 11, 2010, claims 1, 3, 6-9, 11, 12, 15, 17-20, and 25 were rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 7,296,795 issued to Kawasaki. Claim 10 was rejected under 35 USC §103(a) as being unpatentable over Kawasaki in view of U.S. Patent No. 4,567,349 issued to Henry et al. ("Henry"). Claims 14, 16, and 21 were rejected under 35 USC §103(a) as being unpatentable over Kawasaki in view of Henry, and further in view of U.S. Patent Application No. 2004/0060421 to Kako et al. ("Kako"). Claims 24 and 28 were rejected under 35 USC §103(a) as being unpatentable over Kawasaki in view of U.S. Patent No. 3,276,425 issued to Rabb. These rejections are respectfully traversed.

III. Interview

Applicants would like to thank Examiner Kumar for the courtesy and cooperation extended during the interview conducted on August 4, 2010. During the interview, Applicants discussed the independent claims, particularly with respect to features that were not believed to be disclosed or suggested by the art of record. Applicants noted that Kawasaki did not disclose the combination of features that

result in the transfer members being capable of guiding and transferring the sheets to the information reading range as set forth in the claims. Applicants further noted that Kawasaki (and the remaining references) did not disclose the pressing force direction and specific formulas recited in the claims. With respect to Kako and Rabb, Applicants also identified differences between the claims and the teachings of these references.

The Examiner indicated that claims were very confusing and did not properly define or identify various features of the invention. It was agreed that the claims would be revised to improve clarity while better defining features of the invention discussed during the interview that were not disclosed by Kawasaki. It was further agreed that Kako and Rabb did not disclose the alleged features of independent claims 21 and 24, and that those rejections would be withdrawn.

IV. Rejections under 35 USC §102

Claims 1, 3, 6-9, 11, 12, 15, 17-20, and 25 were rejected under 35 USC §102(b) as being anticipated by Kawasaki. Regarding this rejection, the Office Action indicates that Kawasaki discloses a sheet transfer member that is movable and has a transfer surface that is contactable with one of the sheets so that it can be transferred by the sheet transfer member. A sheet supporting surface area is indicated as being contactable with the sheet transferred by the sheet transfer member while extending to be contactable with the sheet between the transfer surface and the information reading point. An information reader is arranged to face the sheet transferred by the sheet transfer member, and has an information reading range that includes an information reading point so that information is securely readable from one of the sheets. The Office Action indicates that when seen in a

view direction perpendicular to a thickness direction of the one of the sheets transferred by the sheet transfer member, a tangential line of a boundary point of the transfer surface of the sheet member where the one of the sheets starts to separate from the transfer surface extends in a side area of an imaginary straight line passing the information reading point and the boundary point. The Office Action further asserts that the side area includes the sheet supporting surface area and that the tangential line intersects the sheet supporting surface area as seen in a view direction in order to press the sheet against the sheet supporting surface area. Applicants respectfully disagree.

By the present Amendment, Applicants have amended independent claim 1 to better define the invention and improve the grammar. In particular, independent claim 1 now specifies that the information reader is arranged to face the selected sheet being transferred, and includes an information reading range within which information from the selected sheet is readable. The information reader also includes an information reading point, located within the information reading range, at which the information is read. Independent claim 1 has also been amended to define the boundary point as a point at which the sheet transfer member contacts the selected sheet. Additionally, the boundary point and the sheet supporting surface area are distant from each other in a direction perpendicular to the imaginary straight line.

As discussed during the interview, Kawasaki discloses a method and apparatus for detecting whether sheet materials are double fed or not. An external force application member is used to apply an external force to a sheet material by bringing an external force applicator into contact with the sheet material. A detector detects the external force being applied and determines whether the sheet materials

are double fed or not based on a signal obtained from the detector. Kawasaki provides no disclosure or suggestion for a structure that would enable a sheet having a straight shape to be pressed against the sheet supporting surface area by the sheet transfer member when the information is read from the sheet at the information reading point in the information reading range. Rather, Kawasaki only provides a structure wherein the sheet must necessarily be curved or bent in order to be pressed against any surface. Furthermore, as discussed during the interview, Kawasaki is completely silent on a boundary point and tangential line having the features recited in independent claim 1. Kawasaki also fails to disclose or suggest the boundary point and the sheet supporting surface area are distant from each other in a direction perpendicular to the imaginary straight line.

It is therefore respectfully submitted that independent claim 1 is allowable over the art of record.

Claims 3, 6-8, 10-12, 14, 15, 17-20, 25, and 26 depend from independent claim 1, and are therefore believed allowable for at least the reasons set forth above with respect to independent claim 1. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

By the present Amendment, independent claim 9 has also been amended in a manner similar to that of independent claim 1. In particular, the description of the information reader has been clarified with respect to the information reading range and the information reading point. Additionally, independent claim 9 now specifies that the pressing direction is parallel to another imaginary straight line passing the center of the sheet transfer member and the center of the press member. The pressing force applied by Kawasaki clearly differs from that of independent claim 9.

Furthermore, the pressing direction now defined in independent claim 9 is not disclosed or suggested by Kawasaki.

It is therefore respectfully submitted that independent claim 9 is allowable over the art of record.

Claim 27 depends from independent claim 9, and is therefore believed allowable for at least the reasons set forth above with respect to independent claim 9.

V. Rejections under 35 USC §103

Claims 16 and 21 were rejected under 35 USC §103(a) as being unpatentable over Kawasaki in view of Henry, and further in view of Kako. Regarding this rejection, the Office Action alleges that Kawasaki discloses all of the features of the claimed invention, except for an information reader having a pair of input points opposed to each other. Kako is relied upon for disclosing a sheet handling apparatus having multiple information reader input points located on one side of each other such in such a manner that the input points face the side of the one of the sheet in a thickness direction of the one of the sheets to read the information through the input points. The Office Action concludes that it would have been obvious to modify the teachings of Kawasaki in view of Henry and Kako to include an information reader having a pair of input points in order to reduce the size of the information reader. Applicants respectfully disagree.

By the present Amendment, independent claim 16 has been amended to clarify the description of various features that were considered confusing. For example, the description of the information reader has been revised to be consistent with independent claim 1. The description of equations regarding orientation of the

sheet supporting surface has also been revised to clarify the meaning of each variable. As discussed during the interview, such features provide specific criteria which cannot be simply inferred from the references. The prior art also appears to be silent on any type of relationship that may be similar to those recited in independent claim 16.

It is therefore respectfully submitted that independent claim 16 is allowable over the art of record.

By the present Amendment, Applicants have amended independent claims 21 and 24 to clarify the language and improve the overall grammar. As discussed during the interview, the features recited in independent claims 21 and 24 were not disclosed by the art of record, and consequently, the rejection predicated on these references would be withdrawn upon revising the claims.

It is therefore respectfully submitted that independent claims 21 and 24 are allowable over the art of record.

Claim 28 depends from independent claim 24, and is therefore believed allowable for at least the reasons set forth above with respect to independent claim 24.

VI. Conclusion


For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 500.43486X00).

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS, LLP.

/Leonid D. Thenor/ 
Leonid D. Thenor
Registration No. 39,397

LDT/vvr
1300 N. Seventeenth Street
Suite 1800
Arlington, Virginia 22209
Tel: 703-312-6600
Fax: 703-312-6666

Dated: November 9, 2010